

(DFN 02)

M.Sc. DEGREE EXAMINATION,
DECEMBER 2019.

First Year

Food and Nutritional Science

NUTRITIONAL BIOCHEMISTRY

Time : Three hours

Maximum : 70 marks

Answer any FIVE questions

All questions carry equal marks

UNIT – I

1. (a) Describe the oxidation of glucose by glycolysis.
- (b) Explain biosynthesis of nucleic acids and repair of DNA.

UNIT – II

2. (a) Describe the mineral metabolism.
- (b) Describe the utilisation, factors affecting utilization of micronutrients.

UNIT – III

3. (a) Write an account on the role vitamins in metabolism.
- (b) Write an account on classification and enzyme inhibition.

UNIT – IV

4. (a) Write an account on humoral immunity and immunoglobulins.
- (b) Explain infection and immunity reactions.

UNIT – V

5. (a) Describe the role of high energy compounds in biochemical energetics.
 - (b) Explain reduction and electron transport chain.
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(DFN 01)

M.Sc. DEGREE EXAMINATION,
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First Year
Food and Nutritional Science

FUNDAMENTALS OF FOOD AND NUTRITION

Time: Three hours

Maximum : 70 marks

Answer any FIVE questions.

All questions carry equal marks.

UNIT I

1. (a) Describe the terminologies in Food, Nutrition and empty calories and describe balanced diet.
- (b) Describe the latest concepts in dietary recommendations and explain RDA.

UNIT II

2. (a) Describe the composition of saturated fatty acids and their biological functions.
- (b) Describe the protein quality and concept of supplementary values of protein.

UNIT III

3. (a) Write an account on water soluble vitamins and their functions.

- (b) Explain deficiency disease caused by Fat soluble vitamins and their symptoms.

UNIT IV

- 4. (a) Write an account on micro minerals, their sources and biological functions.
- (b) Explain the importance of macro elements like, sodium, potassium and chloride and the factors affecting availability.

UNIT V

- 5. (a) Explain, different nutrient deficiency diseases and control measures.
 - (b) Describe the role of RDA in organising government programmes on nutrition.
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(DFN03)

M.Sc. DEGREE EXAMINATION,
DECEMBER 2019.

First Year

Food and Nutritional Science

FUNCTIONAL FOODS

Time : Three hours

Maximum : 70 marks

Answer any FIVE questions.

All questions carry equal marks.

UNIT I

1. (a) Explain the current market scenario of the health foods.
- (b) Describe public demand and Indian market potential of functional foods.

UNIT II

2. (a) Describe the types of fats, PUFA oils n3, n6 fatty acids and their importance.
- (b) Describe the protein powders, sources, types and methods of extraction.

UNIT III

3. (a) Describe role of nutraceuticals in health and therapeutic applications.
- (b) Write an account on diabetic nuts, confectioneries and lactose free foods.

UNIT IV

4. (a) Explain artificial sweeteners and their therapeutic applications.
- (b) Describe the non nutritive sweeteners ,their need, importance and types.

UNIT V

5. (a) Explain the need and importance of technologies and organisms for food biotechnology.
 - (b) Write an account on food processing improvements through biotechnology.
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(DFN04)

M.Sc. DEGREE EXAMINATION,
DECEMBER 2019.

First Year

Food and Nutritional Science

INSTITUTIONAL FOODS SERVICE MANAGEMENT

Time : Three hours

Maximum : 70 marks

Answer all FIVE questions.

All questions carry equal marks.

UNIT I

1. (a) Describe the principles and functions of food service management, its need and management.

Or

- (b) Describe the food services available in schools, old people house, hospitals and nursing homes.

UNIT II

2. (a) Write an account on building plans cum outlays of work places and kitchen spaces.

Or

- (b) Describe the types of food service systems and mechanics of waiter services.

UNIT III

3. (a) Describe health and hygiene of personnel, food borne diseases and importance of surveillance.

Or

- (b) Write an account on food safety awareness programmes to food handlers and consumers.

UNIT IV

4. (a) Define personal management and scope of financial management.

Or

- (b) Explain cost concept, cost control, pricing, book keeping and accounting.

UNIT V

5. (a) Describe food safety in hotels, street foods industry and canteens.

Or

- (b) Write an account on monitoring work, employees facilities and benefits.
